

WHAT IS CLAIMED IS:

1. An array assembly comprising:
 - (a) a plastic base layer;
 - (b) a glass layer forward of the base layer; and
 - (c) an array of polymers having a pattern of features on a front surface of the glass layer.
2. An array assembly according to claim 1 wherein the polymers are biopolymers.
3. An array assembly according to claim 1 additionally comprising an opaque layer between the base and glass layers.
4. An array assembly according to claim 1 additionally comprising a reflective layer between the base and glass layers.
5. An array assembly according to claim 4 wherein the reflective layer comprises a metal.
6. An array assembly according to claim 4 wherein the reflective layer comprises multiple layers of dielectric materials.
7. An array assembly according to claim 4 wherein the glass layer has a thickness of 40-200 nm
8. An array assembly according to claim 4 wherein the plastic base layer has a fluorescence of at least ten reference units.
9. An array assembly according to claim 4 wherein the plastic base layer absorbs at least 10% of light at 532 nm incident on a front surface of the assembly.

10. An array assembly according to claim 1 additionally comprising an identifier on a back surface of the plastic base layer.
11. An array assembly according to claim 1, wherein the array assembly is flexible.
12. An array assembly according to claim 1, wherein the assembly is in the form of an elongated web.
13. An array assembly according to claim 12 with multiple arrays disposed along the front surface of the glass layer.
14. A method of fabricating an array assembly using a plastic base layer with a glass layer bound thereto at a position forward of the plastic base layer, the method comprising:
forming an array of polymers having a pattern of features on a front surface of the glass layer.
15. A method according to claim 14 wherein there is a reflective layer between the base and glass layers.
16. A method of claim 15 wherein the reflective layer comprises a metal.
17. A method of claim 16 wherein the reflective layer comprises multiple layers of dielectric materials.
18. A method according to claim 14 wherein the glass layer has a thickness of . 40 to 200 nm.
19. An array assembly according to claim 15 wherein the plastic base layer has a fluorescence of at least ten reference units.

20. A method according to claim 14 additionally comprising forming an identifier on a back surface of the plastic base layer.
21. A method claim 14, wherein the array assembly is flexible.
22. A method according to claim 14, wherein the assembly is in the form of an elongated web.
23. A method according to claim 14 wherein multiple arrays are formed by depositing drops onto the front surface of the glass layer, which contain the polymers or polymer precursor units.
24. A method according to claim 23 wherein the polymers are polynucleotides or peptides.
25. A method of reading an array having a plastic base layer, a glass layer forward of the base layer, a reflective layer intermediate the base and glass layers, and an array of polymers having a pattern of features on a front surface of the glass layer, the method comprising illuminating features of the array and detecting any resulting fluorescence.